Attorney Docket No.: Q82508

AMENDMENT UNDER 37 C.F.R. § 1.111

U.S. Appln. No.: 10/502,353

## **AMENDMENTS TO THE SPECIFICATION**

Please replace the paragraph starting on page 8, line 1 and ending line 33 with the following amended paragraph:

According to the invention, each communications node N1, N3, N4 comprises:

- a section 2c, 2e, 2f of the fiber 2, respectively,
- power coupler type bidirectional extraction means 10, 30, 40 for extracting a fraction of the power of the optical signals in transit in the node via its fiber section,
- 2×1 switch type switching means 11, 31, 41 with two branches for directing signals extracted by the respective extraction means 10, 30, 40,
- control means 12, 32, 42 for detecting the transmission state of the network, i.e. of the fiber 2, and controlling the switching means 11, 31, 41 as a function of that state, and
- an optical gate 13, 33, 43 for transmitting or eliminating optical signals and controlled by the respective control means 12, 32, 42.

Moreover, each amplified communications node N2, N5 comprises:

- a section 2d, 2g of the fiber 2, respectively,
- 2×2 optical switch type switching means 21, 51 with two states (direct propagation mode, crossed propagation mode) inserted into the respective fiber section 2d, 2g for directing the transported signals to optical amplifier means 24, 54 also inserted into this fiber section,
- control means 22, 52 for detecting the transmission state of the network, i.e. of the

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fiber 2, and controlling the switching means 21, 51 as a function of that state, and

- power coupler type extraction means 20, 50 for extracting optical signals transported

by the respective fiber section 2d, 2g.

Please replace the paragraph starting on page 10, line 19 and ending on page 11, line

12 with the following amended paragraph:

According to the invention, each communications node N1, N3, N4 comprises:

- a section <u>6c</u>, <u>6e</u>, <u>6f</u><del>6d</del>, <del>6g</del>, of the fiber 6, respectively

- power coupler type bidirectional insertion means 100, 300, 400 for inserting optical

signals into its fiber section,

- 2×1 switch type switching means 110, 310, 410 with two branches for directing the

signals sent to the respective insertion means 100, 300, 400, and

- control means 120, 320, 420 for detecting the transmission state of the network, i.e. of

the fiber 6, and controlling the switching means 110, 310, 410 as a function of that

state.

Moreover, each amplified communications node N2, N5 comprises:

- a section 6d, 6g of the fiber 6, respectively,

- 2×2 optical switch type switching means 210, 510 with two states (direct propagation

mode, crossed propagation mode) inserted into the respective fiber section 6d, 6g for

directing signals transported by the associated fiber section to optical amplifier means

240, 540 also inserted into this fiber section,

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- control means 220, 520 for detecting the transmission state of the network, i.e. of the fiber 6, and controlling the switching means 210, 510 as a function of that state, and

- power coupler type insertion means 200, 500 for inserting optical signals into the associated fiber section ahead of the amplifier means 240, 540.